

California Monthly Climate Summary June 2007

Weather Highlights

June 2007 continued this year's trend of above-mean temperatures and below average precipitation. For the National Weather Service Co-Operative Network, the statewide average mean temperature was 1.5 degrees higher than the long-term average. The National Weather Service Cooperative Network showed statewide average precipitation to be 41% of the long term average. Every month of 2007 has recorded below normal precipitation.

An upper-level high pressure system passing over California started June off with above-normal temperatures. The San Joaquin Valley saw temperatures in the 90s early on in June. The first week of June ended with a strong Pacific storm bringing gusty winds to the Central Valley. Precipitation was scattered and limited to the mountains. Snow did fall at Tioga Pass on the 5th and on the Kern Plateau on the 6th. A peak wind gust of 82 miles per hour (mph) was recorded in the southern Sierra Nevada at Indian Wells Canyon. The second week of June saw high pressure, offshore flow and warm weather move into the state. Temperatures surged into the 90s on the North Coast and to triple digits in many places around the state. The end of the week saw the heat move eastward bringing about onshore flow conditions and cooler temperatures. The third week of June was a typical late-June week with another ridge of high pressure with no significant rain hitting California. A forest fire in the south end of the Tahoe basin created lots of smoke for the region and damaged or destroyed over 200 structures. June closed out with more heat and no precipitation.

Preliminary records reported on the National Weather Service Record Event Report show that statewide there were 4 temperature records tied or broken and no precipitation records tied or broken for the month. There were only 3 days in June with a record set somewhere in California. It should be noted that this data is preliminary and may not include all records set. Statewide extremes from the California Data Exchange Center's (CDEC) network of temperature gages are shown below. A table of regional average minimum, mean, and maximum temperatures from the CDEC and CIMIS networks is also shown below.

Precipitation in June was below normal again. The largest amount of precipitation recorded in the CDEC precipitation gages for June 2007 was at Adin Ranger Station where 0.79 inches of rain fell. This is 77% of the average June rainfall at this site. Fifty-three stations in the state reported zero precipitation for the month. The 8-Station Index for northern California precipitation recorded 0.4 inches. This is 40% of the long-term average for June. A table of October through June 8-Station Index totals can be found at the end of the summary. With no further rain for the rest of the water year, this year's 8-station precipitation total ranks as the 17th driest year in the last 87 years. Note that last year was the 5th wettest year. In the southern part of the state, the downtown Los Angeles station recorded only no rain in June which sets the record for driest year on record with a total of 3.21 inches. The previous driest year on record was from July 1960 to June 1961 when only 4.85 inches fell. More recently, from July 2001 to June 2002, 4.92 inches of rain fell. Statewide, the average precipitation for June was 24% of the long-term average based on the California Data Exchange Center (CDEC) gages.

Precipitation percentages by region from the CDEC gages are shown in a table at the end of this document.

The continuing dry weather over California has been reflected in the Drought Monitor Maps which can be found on the National Drought Mitigation Center's (NDMC) website <http://drought.unl.edu/dm/>. These maps are largely a reflection of precipitation and soil moisture deficit estimates. The northwest part of the state is depicted as abnormally dry (D0). Moderate drought conditions (D1) are shown for the Sacramento and lower San Joaquin Valleys. The Central Coast, Sierra Nevada and North Lahontan regions are depicted as severe drought (D2). The southern parts of the state are depicted by the NDMC as being in extreme drought (D3). Maps are updated weekly.

June is the third month of the April through July snowmelt season. Water supply information for California can be found at http://cdec.water.ca.gov/water_supply.html. June's runoff ranged from 89% of average on the McCloud River above Shasta Dam to 7% on the Tule River below Success Dam. The statewide average was 25%. The 50% and 90% exceedence water supply categories are dry for the Sacramento Basin and critically dry for the San Joaquin Basin. A historical listing of water year categories for both basins can be found at <http://cdec.water.ca.gov/cgi-progs/iodir/WSIHIST>.

ENSO Conditions and Long-Range Outlooks

The El Niño/Southern Oscillation (ENSO) is being classified as a neutral pattern. Equatorial sea surface temperature anomalies for the eastern tropical Pacific are running between -0.5° C and -2.0° C. Dynamical models forecast a continuing downward trend towards La Nina conditions in the next couple of months while statistical models are forecasting conditions to remain in a neutral pattern, or transition to a La Nina pattern more slowly than the dynamical models. More information on the topic can be found at the Climate Prediction Center's web site: http://www.cpc.ncep.noaa.gov/products/analysis_monitoring/enso_advisory/. Updates are posted weekly. Current climate indicators including ENSO conditions indicate a warmer than average July through September period for most of California. Precipitation forecasts show below normal totals for the next three months for the northern half of the state and equal chance of above, near, or below normal precipitation for the rest of the state. Long-range outlook plots of precipitation and temperature can be found at: <http://www.wrcc.dri.edu/longrang/>. General weather information of interest can be found at <http://www.noaawatch.gov/>. For anomaly information please see http://www.wrcc.dri.edu/anom/cal_anom.html.

Agricultural Data

June provided weather for the planting, maturing and harvesting of agricultural products across California. Grape, almond, and pistachio crops are looking good. Olives are sizing well. Wheat and oat harvests have begun. Some dryland grain fields were lost due to dry conditions. Rice is emerging above water level. The fourth cutting of Alfalfa started in some parts of the state. The cherry harvest continued along with some varieties of peaches and nectarines, plums, strawberries and blueberries. Range conditions continue to suffer due to the lack of precipitation. Some livestock are being put on irrigated fields and some herds are being thinned due to dry conditions. Hay is in high demand and supplemental feeding continues. For further crop information see <http://www.nass.usda.gov/index.asp>.

Other Climate Summaries

[California Climate Tracker](#) (new product of Western Region Climate Center)

[Golden Gate Weather Service Climate Summary](#)

[NOAA Monthly State of the Climate Report](#)

Statewide Extremes

High Temperature – 115° F (Mojave River Sink, South Lahontan)

Low Temperature - 12° F (Casa Vieja Meadows, Tulare Basin)

High Precipitation – 0.79 inches (Adin Ranger Station, North Lahontan)

Low Precipitation –0 inches (53 stations)

Statewide Precipitation Statistics

Hydrologic Region	Region Weight	Basins Reporting			Stations Reporting			Percent of Historic Average	
		Basins	June	Oct-June	Stations	June	Oct-June	June	Oct-June
NORTH COAST	0.27	5	3	3	19	6	6	31.7%	84%
SAN FRANCISCO BAY	0.03	2	2	2	6	4	4	4.2%	74%
CENTRAL COAST	0.06	3	3	3	11	6	5	0%	51%
SOUTH COAST	0.06	3	3	3	15	12	11	0%	29%
SACRAMENTO RIVER	0.26	5	5	5	43	11	10	50.7%	64%
SAN JOAQUIN RIVER	0.12	6	5	5	25	14	12	1.9%	61%
TULARE LAKE	0.07	5	3	3	28	10	10	0%	54%
NORTH LAHONTAN	0.04	3	3	3	14	8	8	36.8%	59%
SOUTH LAHONTAN	0.06	3	2	2	15	7	7	0.4%	26%
COLORADO RIVER	0.03	1	1	1	6	2	3	0%	12%
STATEWIDE WEIGHTED AVERAGE	1.00	36	30	30	182	80	76	23.6%	62%

Statewide Mean Temperature Data by Hydrologic Region (degrees F)

Hydrologic Region	No. Stations	Minimum	Average	Maximum
North Coast	34	37.7	61.3	85.4
SF Bay	20	46.5	64.5	86.7
Central Coast	33	46.2	62.5	80.8
South Coast	66	47.0	68.4	90.2
Sacramento	93	38.5	66.7	89.5
San Joaquin	72	41.2	66.5	87.1
Tulare Lake	17	29.1	60.7	82.3
North Lahontan	6	37.8	62.8	82.7
South Lahontan	22	36.3	66.5	86.6
Colorado River Desert	22	62.5	85.3	103.7
Statewide Weighted Average	385	39.7	65.0	87.0

Northern California 8-Station Index October through June Values

Month	Precipitation (inches)	% of Average
October	0.5	17
November	5.7	90
December	8.5	101
January	1.4	16
February	13.6	170
March	1.6	23
April	3.1	79
May	1.2	55
June	0.4	40